

CHARGE NUMBER: 1806

PROJECT TITLE: New Tobacco Processes

PROJECT LEADER: S. R. Wagoner

PERIOD COVERED: November 1-30, 1985

I. STEM TREATMENT

A. Objective

To develop methods of improving the subjective character of bright and burley stems.

B. Status

All stem preparations were completed in the test program designed to identify the mechanism causing the positive subjective modification from treating stems with cellulase. Stem treatments included variations of incubation time (24, 48, 72 hr), incubation temperature (4°C and 50°C), and level of enzyme (0, 8% and deactivated enzyme). Ten pounds of each stem product were prepared.

A pilot plant run, producing an RL sheet from cellulase treated material, was conducted.

C. Plans

Machine-made cigarettes containing 100% of the above treated stem will be produced and submitted for chemical and subjective analyses.

Physical and chemical analyses of the RL sheet will be conducted. Cigarettes will be made from the RL for subjective evaluation.

II. CIGARETTE QUALITY

A. Objective

Evaluate cigarette quality improvements using tobacco materials produced from new technologies.

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B. Status

A test program was initiated to evaluate the performance of tobacco materials that are produced from various new technologies. These materials were whole cut leaf, high tensile RL, improved DIET, unfolded strip, and roll stripped burley. Two blends containing combinations of these materials were produced. The difference between the two was the bright fraction, one being whole cut leaf and one unfolded strip. Control blends, containing materials produced from current production modes, were also made.

C. Plans

Cigarettes will be made from the above blends, and the effect of the test materials on blend and cigarette quality will be determined.

III. FOAMED BINDER

A. Objective

Develop a method to produce a binder for a bonded cigarette rod.

B. Status

Start-up of the pressure vessel has been conducted. Citrus pectin has been successfully degraded, both thermally and enzymatically.

C. Plans

Using the vessel, assist Project 1503 in the development of a binder.

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